City of Tigard Comprehensive Plan

Environmental Quality Policy Interest Team

June 7, 2007
6:30 – 8:30 pm

Agenda for Meeting #1

6:30 – 6:50	Welcome Meeting Objectives Introductions Roles and Responsibilities	Darren Wyss All
6:50 – 7:10	Comprehensive Planning Overview - schedule - role of interest teams - goals/policies/action items	Darren Wyss
7:10 – 7:50	Overview of Draft Building Blocks Discussion: - additions - changes - deletions	Darren Wyss All
7:50 – 8:15	Evaluation Exercise and Discussion	All
8:15 – 8:20	Overview of Next Meeting Agenda: Review and refine draft policy statements	Darren Wyss
8:20 – 8:30	Closing Comments Adjourn	Darren Wyss

City of Tigard Comprehensive Plan

Resource Document A of the *Tigard 2007* resource report provided a summary of community surveys and work completed by Tigard Beyond Tomorrow. The summary outlined a number of key issues and values that the community has identified and it forms a solid foundation for updating the City's Comprehensive Plan. Below is a list of community issues and values developed from Resource Document A (which can be found in its entirety at www.tigard-or.gov/2027). Please review the list as it will provide important background information when discussing goals, policies, and action measures.

COMMUNITY VALUES

The citizens of Tigard value the location of the community and the ease of access to travel options.

The citizens of Tigard value the safe and quiet residential atmosphere of the community and the character of their neighborhoods.

The citizens of Tigard value trees and natural resources and feel that protecting these resources will benefit the community.

The citizens of Tigard value the public services that are provided to the community, particularly the library, parks, senior center, and police.

The citizens of Tigard value pedestrian and bicycle paths in the community and support the development of a well connected network.

The citizens of Tigard value access to neighborhood parks and open space within a half mile from their home.

The citizens of Tigard value access to bus service in the community.

The citizens of Tigard value the community's downtown core and support investment to make improvements.

The citizens of Tigard value and understand their responsibility to participate as members of the community.

The citizens of Tigard value access to educational opportunities for citizens of all ages.

The citizens of Tigard value small and local businesses that contribute to a healthy economy.

COMMUNITY ISSUES

The citizens of Tigard have identified traffic congestion as the top concern in the community.

The citizens of Tigard are concerned about the maintenance of community streets.

The citizens of Tigard are concerned about preserving community livability by minimizing neighborhood traffic.

The citizens of Tigard are concerned about population increases and the impact upon the community.

The citizens of Tigard are concerned about growth and development in the community and the compatibility between new and existing development.

The citizens of Tigard are concerned with the community's appearance, particularly the downtown.

The citizens of Tigard are concerned that the community's downtown is not living up to its potential.

The citizens of Tigard are concerned about the impact of growth on the community's natural resources.

The citizens of Tigard are concerned about the future of public services, which includes safety, schools and infrastructure.

The citizens of Tigard are concerned about the lack of a recreation program and the number of parks in the community.

City of Tigard Comprehensive Plan

The *Tigard 2007* resource report establishes the factual basis that will be used, in conjunction with the community issues and values, to develop Comprehensive Plan goals, policies, and action measures. Below are the key findings from the Environmental Quality chapter of the document (which can be found in its entirety at www.tigard-or.gov/2027). Please review the key findings as they will provide important background information when discussing goals, policies, and action measures.

KEY FINDINGS – AIR RESOURCE QUALITY

- The air pollutants of greatest concern in Oregon are:
- Ground-level ozone, commonly known as smog
- Fine particulate matter (mostly from wood smoke, other combustion sources, cars and dust)
- Hazardous air pollutants (also called Air Toxics)
- Carbon monoxide (mostly from motor vehicles)
- The City of Tigard is part of the Portland Area Airshed, which is currently in compliance with the Clean Air Act requirements.
- DEQ has issued six active Air Contaminant Discharge Permits (ACDP) within the City to regulate minor sources of contaminant emissions.
- Motor vehicles are now the primary source of air pollution in Oregon and the number of miles driven daily by Tigard residents has increased 67% since 1990.
- Options available to the City for reducing vehicle miles traveled:
- Mixed-use zones that encourage working, living, and shopping in the same neighborhood
- Land use patterns that provide alternative transportation opportunities
- Providing opportunities for increased density along public transit lines
- Developing a public transit system that is reliable, connected, and efficient
- Building a bicycle and pedestrian network that is connected, safe, and accessible

- Connecting streets to provide additional travel options
- Options available for decreasing motor vehicle emissions include alternative fuels/vehicles.
- The primary sources of household pollutants in Tigard include wood burning fireplaces, and lawn and garden equipment.
- The City regulates noise and light pollution through Environmental Performance Standards.
- The City can improve air quality for the community by continuing to participate in alternative transportation programs and by purchasing alternative vehicles.

KEY FINDINGS – WATER RESOURCE QUALITY

- The Federal Clean Water Act regulates the release of pollutants into waterways through the NPDES permit.
- Clean Water Services holds the NPDES permits for wastewater and stormwater in the Tualatin River watershed and submits plans to Oregon DEQ outlining best management practices.
- The City of Tigard implements the NPDES permits through and IGA with Clean Water Services. The IGA outlines the functions the City must perform to ensure compliance.
- Clean Water Services has a number of programs, including the Healthy Streams Plan, which addresses non-point source pollution in the watershed.
- The City is devoted to improving water quality through the Sensitive Lands chapter of the Community Development Code and the Citywide Sewer Extension Program.
- Water quality in the Tualatin River basin has been generally improving since the 1970s, despite continued urbanization in the watershed.
- DEQ has characterized Fanno Creek and the Tualatin River as having poor water quality within the City of Tigard, and both will soon be added to the updated 303d list for the Tualatin Basin.
- Point source pollution is predominately wastewater and stormwater discharge and is easily monitored and measured.
- Non-point source is the largest source of water pollution in Oregon.
- Run-off from impervious surfaces, pet waste, and erosion are problematic non-point sources.
- Stormwater management is important to improving water quality in the City of Tigard and the City manages its system through the IGA with Clean Water Services.

- The City maintains 79 water quality facilities that intend to remove pollutants and detain stormwater to reduce channel erosion.
- Reducing impervious surfaces and using green street concepts can help improve stormwater quality.
- Stream channel and riparian restoration activities can contribute to the reduction of water pollution.
- The City has planted 30,000 native trees as part of stream restoration projects in the past six years.
- The City has set a goal of planting 67,696 trees in the next five years.
- Trees outside of the riparian zone can help improve water quality through interception and evapotranspiration.
- Proper wetland and floodplain function can remove pollutants from the surface water system in the community.

KEY FINDINGS – LAND RESOURCE QUALITY

- The City is a member of the Metro wasteshed and the local plan is the Regional Solid Waste Management Plan (RSWMP), which complies with DEQ requirements. The plan provides a framework for coordinating solid waste programs within the region, establishes direction for the system (reduction and recovery), and identifies roles and responsibilities.
- The City is responsible for regulating and managing solid waste and recycling collection services through franchise agreements with private haulers, and reviewing collection rates and service standards.
- Clean Water Services (CWS) operates the Durham Wastewater Treatment Facility within the city limits and is responsible for the collection and disposal of waste that results from the treatment process.
- There are currently no solid waste or recycling debris collection or processing facilities inside the city limits.
- Per capita generation of solid waste has increased annually by 3.2% over the last ten years in the Metro region.
- The recycling of solid waste conserves limited natural resources and energy. The recovery rate for residential recycling is close to targets set by the RSWMP, but commercial recovery rates are well below the target.

- Target areas that Metro has identified as having significant room for improvement are the construction and business sectors, both of which have been regulated by other jurisdictions to improve recovery rates.
- The DEQ regulates hazardous waste in Oregon and they administer permitting, collection, disposal, and cleanup programs, as well as educational programs to reduce risks associated with hazardous wastes.
- Household hazardous waste is not easily regulated and is an educational priority for DEQ and Metro.
- Currently, there are no permanent hazardous waste collection, storage, or disposal facilities within the city limits. All hazardous waste is transported outside of Tigard for processing and disposal.

KEY FINDINGS – ENERGY CONSERVATION

- The Oregon Department of Energy (DOE) publishes a biennial report that provides general information and quantitative data which can assist the City in making energy related decisions.
- Transportation is the largest use of energy in the State at 38%. A considerable reduction in energy use can be made with individuals altering their habits related to the use of motor vehicles.
- The City has no energy generation or supply facilities and therefore the community's energy supply and pricing is controlled by forces beyond its direct influence.
- Unstable energy pricing and supply will continue to affect communities as it did in 2002, when Oregonians spent 50% more per unit of energy to heat their homes than in 1998.
- World oil production may peak in the next decade and begin a long-term decline. Coupled with a growth in worldwide demand, peak oil will maintain or increase already high oil prices.
- Natural gas supplies from North America are declining, while prices have doubled in the past five years. Importing from overseas is an expensive option as it requires the gas to be liquefied, transport tankers, and regasification plants. Worldwide competition for the gas is also expected to increase.
- The DOE recommends conservation efforts for households, businesses, industry, and transportation, as well as developing clean and renewable energy resources for

insulation from and to reduce the community's vulnerability to volatile pricing and supplies.

- A number of alternative fuel options exist for motor vehicles, but supplies and availability are limited.
- Local jurisdictions have the ability to affect energy conservation efforts by reducing automobile trips through developing efficient land use plans that promote compact, mixed use communities.
- The City can lead by example by becoming more energy efficient as an organization or challenge residents to reach energy conservation goals set by the community.
- Large energy uses which the City has control over include street lighting, water transfer pumps, heating and cooling of municipal buildings, and the motor vehicle pool.
- Solar-generated power and wood heating are the two most common options available to the community for producing their own energy. Wood heating can be problematic to air quality due to the release of fine particulate matter.
- The City currently provides some flexibility, with set-back adjustments and variances during the land use planning process, that could take advantage of solar radiation.
- Weatherization, energy efficient building materials and appliances, and alternative energy sources can all reduce energy consumption in buildings.
- The following land use planning strategies can result in a more energy-efficient community:
    - Establishing mixed-use zones to encourage working, living, and shopping in the same neighborhood
    - Providing opportunities for increased density along public transit lines
    - Developing a public transit system that is reliable, connected, and efficient
    - Building a bicycle and pedestrian network that is connected, safe, and accessible
    - Connecting streets for efficiency and reducing congestion
    - Re-use of vacant land and those uses which are not energy efficient

Environmental Quality Policy Building Blocks

GOAL

4.1 Reduce air pollution and improve air quality in the community and region.

POLICY BUILDING BLOCKS:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
The Clean Air Act outlines specific air quality standards that must be met.	▪ It is the responsibility of the City to verify land use compliance before DEQ issues Air Contaminant Discharge Permits or Title V Operating Permits. ▪ The City issues land use and building permits for development. ▪ The City is responsible for land use planning and its affect on air quality.

Assembled Policy (example):

The City shall ensure that all development complies with or exceeds regional, state, and federal standards for air quality.

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Air quality is a regional issue that must be addressed on a regional level.	▪ DEQ develops carbon monoxide and ozone maintenance plans for the Portland Metro region. ▪ Transportation planning can have the greatest impact on air quality. ▪ The Motor Vehicle Inspection Program, Employee Commute Options Program, and the Industrial Emissions Management Program are elements of DEQ plans.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Motor vehicles are now the primary source of air pollution in Oregon.	▪ Land use patterns can have an impact on vehicle miles traveled and the associated impacts on air quality. ▪ Mixed use zoning can encourage working, living, and shopping in the same neighborhood. ▪ Increased density along major public transit routes can reduce automobile trips. ▪ Compatibility between new and existing development is a value expressed by the community through surveys in the past five years. ▪ Connected bicycle and pedestrian infrastructure can encourage more biking and walking from residents.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
The City can directly impact air quality through municipal operations.	▪ Hybrid vehicles emit less pollution than conventional vehicles. ▪ Alternative fuels produce can produce less pollution than petroleum based fuels. ▪ Encourage employees to use alternative forms of transportation through incentives. ▪ Researching and implement technologies to reduce emissions.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Congestion causes localized air quality problems.	▪ The Metro Regional Transportation Plan allocates funding for transportation projects. ▪ A number of highways under ODOT jurisdiction either cross through or border the City of Tigard. ▪ A number of alternatives exist (access management, intersection improvements, and intelligent transportation systems) for reducing congestion, which can help in improving air quality.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Vegetation can help to improve air quality through the conversion of carbon dioxide to oxygen.	▪ Photosynthesis removes carbon dioxide from the air. ▪ Carbon Dioxide is a greenhouse gas. ▪ Tigard citizens have indicated their preference for protection of open space and natural resources through community surveys.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Noise and light are forms of air pollution in the community.	▪ The City has adopted environmental performance measures in the municipal code. ▪ The City has enforced noise standards since DEQ eliminated its noise program in 1991 ▪ DEQ defines noise as a pollutant and various standards have been established to protect public welfare.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Household pollutants can negatively impact the air quality of the community.	▪ Wood burning fireplaces, which are permitted and inspected by the City, emit fine particulate matter into the air. ▪ Gasoline-powered lawn and garden equipment emit ozone, carbon dioxide, and carbon dioxide. ▪ The City does not currently have a policy regarding household pollutants. Most jurisdictions use education to address impacts on community air quality.

Assembled Policy:

Environmental Quality Policy Building Blocks

GOAL

4.2 Ensure land use activities protect and enhance the community's water quality.

POLICY BUILDING BLOCKS:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
The Clean Water Act outlines specific water quality standards that must be met.	▪ It is the responsibility of the City to ensure development complies with water quality standards. ▪ The City issues land use and building permits for development. ▪ The City is responsible for land use planning and its affect on water quality.

Assembled Policy (example):

4.1.1 The City shall ensure that all development complies with or exceeds regional, state, and federal standards for water quality.

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Water quality is a basin-wide issue that should be addressed in that manner.	▪ Clean Water Services (CWS) holds the NPDES permits for the Tualatin River basin. ▪ CWS is responsible for submitting Stormwater and Wastewater management plans to DEQ for compliance with the Clean Water Act. ▪ Tigard is a co-implementer of the NPDES permits and associated plans.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Clean Water Services has developed standards to protect water quality and comply with the Clean Water Act and NPDES permits.	▪ CWS Design and Construction Standards have been developed and must be applied within the Tualatin River basin. ▪ The Standards protect the health, safety, and welfare of the community. ▪ The Standards are implemented to minimize water quality impacts from stormwater and sanitary sewers. ▪ The Standards, combined with other federal, state, and regional laws are intended to protect the beneficial uses of water.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Impervious surfaces have a significant impact on water quality.	▪ They collect pollutants and toxins that run-off into the stormwater system. ▪ They increase the peak flow of storm events. ▪ Natural filtration can keep pollutants out of surface water and act to balance the timing of the release of rain into the system. ▪ Increasing peak flows causes erosion.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Stream channel and riparian restoration are activities that can contribute to improved water quality.	▪ Native vegetation filters nutrients and provides shade, structure, and food sources to streams. ▪ Trees outside the riparian corridor provide interception and evapotranspiration to reduce stormwater run-off. ▪ Proper wetland and floodplain function filters pollutants out of the surface water system. ▪ Meandering channels and large woody debris promote over bank flow and floodplain function. ▪ Repairing culverts and catch basins can improve water quality.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Development impacts water quality through erosion and stormwater run-off.	▪ New developments over one acre are required to secure a permit from DEQ. ▪ The City acts as permit agents for erosion and sediment control during construction activities. ▪ Minimum landscaping requirements can reduce run-off after construction is complete. ▪ Bio-swales and other green treatments can reduce erosion and run-off.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Personal non-point source pollution is difficult to regulate.	▪ Personal fertilizers and pesticides require no training for their purchase and use. ▪ Bacteria from animal waste, particularly canine, are problematic in the Fanno Creek basin. ▪ Properly functioning vehicles and reduced trips can help to keep toxic pollutants out of run-off. ▪ Toxic products, like paint, must be disposed of properly to keep them out of the surface water system. ▪ Low impact development and green building techniques can help to improve water quality. ▪ Clean Water Services maintains a public outreach and education program.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Green street concepts are a natural alternative to stormwater management.	▪ Bio-swales and vegetation help to filter pollutants from street run-off. ▪ Green street concepts can help to slow and minimize the peak storm flow. ▪ The City is going to apply these concepts to the reconstruction of Burnham and Main Streets. ▪ Not all areas are conducive to green street concepts because of topography, soil type, and land use intensity.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
Leaking septic tanks can lead to water quality problems.	▪ The City provides sewer service to areas inside the city limits. ▪ Some neighborhoods within the city limits do not have sewer service. ▪ The City implements a program to get neighborhoods connected to the sanitary sewer provided they pay their fair share.

Environmental Quality Policy Building Blocks

GOAL

4.3 Reduce the amount of solid waste entering landfills.

POLICY BUILDING BLOCKS:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Metro develops the Regional Solid Waste Management Plan (RSWMP) for the Metro wasteshed.	▪ Tigard is a member of the Metro wasteshed and collaborates in the development of the RSWMP. ▪ The RSWMP fulfills state requirements for a waste reduction plan. ▪ The RSWMP addresses population growth impacts and plans for landfill capacity in the future. ▪ The City implements the plan through the Washington County Cooperative.

Assembled Policy (example):

4.3.1 The City shall continue collaborating with federal, state, and regional agencies in the development and implementation of solid waste management plans and programs.

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
The City does not own or operated a solid waste or recycling collection service.	▪ The City enters into franchise agreements to ensure compliance with the RSWMP. ▪ Franchise agreements ensure recycling opportunities are accessible to all households, businesses, and institutions. ▪ The franchise agreements use prevention and recovery efforts to reduce waste. ▪ The City must ensure services are cost effective and environmentally sensitive.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Hazardous waste must be managed appropriately to limit contamination.	▪ Oregon DEQ regulates hazardous waste in the state. ▪ DEQ administers permitting, collection, disposal, and cleanup programs. ▪ Hazardous waste permits range from retail paint stores to light manufacturers. ▪ Cleanup of hazardous waste sites is very important to ensure the community's land resources are free of contamination.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Public education is an important component of waste reduction and proper disposal.	▪ Household recycling, composting, and reuse are not regulated, but are good opportunities to reduce waste. ▪ Household hazardous wastes (cleaning products, paint, gasoline, etc.) are not regulated and are targeted as educational programs in DEQ and Metro plans. ▪ Construction and business activities have been identified as two areas with significant room for improvement in recycling and neither are regulated at this time.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
The City can lead by example in reducing solid waste.	▪ Municipal operations generate a fair amount of solid waste. ▪ Purchasing recycled, resource efficient, and durable materials will decrease the City's impact on solid waste disposal. ▪ In-house recycling programs can have a great impact on municipal solid waste generation.

Assembled Policy:

Environmental Quality Policy Building Blocks

GOAL

4.4 Reduce energy consumption.

POLICY BUILDING BLOCKS:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
The largest consumption of energy in the state is by the transportation sector.	▪ The City can help to reduce vehicle miles traveled through land use patterns that reduce dependency on the automobile (mixed use and neighborhood commercial, and high density along transit corridors). ▪ Public transit is one solution in reducing vehicle miles traveled if it is reliable, connected, and efficient. ▪ Bicycles and walking can help reduce vehicle miles traveled if infrastructure is in place that is connected and safe.

Assembled Policy (example):

4.4.1 The City shall promote the reduction of energy consumption associated with vehicle miles traveled through:

A. Land use patterns that reduce dependency on the automobile;
B. Public transit that is reliable, connected, and efficient; and
C. Bicycle and pedestrian infrastructure that is safe and well connected.

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Oregon Dept. of Energy has taken the lead on energy planning in the state.	▪ The Oregon Energy Plan is updated every biennium and includes an action plan to meet the goals. ▪ Regional transportation planning can have great impact on energy consumption. ▪ The state manages education and incentive programs for energy conservation.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
Alternative site designs during development can help reduce energy demand.	▪ Topography, vegetation, and solar access are attributes that can be used proactively to reduce energy demand. ▪ Heating, cooling, and lighting needs are impacted by site design. ▪ The City issues land use permits, reviews building plans and issues building permits within the city limits.

Assembled Policy:

Policy Principle (Cornerstone) :	Other Building Blocks (actions and results)
A building's energy efficiency is an important component of reducing energy consumption.	▪ The state regulates energy efficiency standards through the Oregon Residential Specialty Code.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
The City can lead by example and reduce municipal energy consumption.	▪ Design and develop public facilities to use alternative energy sources and conserve energy in operations. ▪ Energy audits are a mechanism for improving energy efficiency in existing public facilities. ▪ Green energy programs use only renewable energy resources. ▪ New technologies can help reduce municipal energy consumption. ▪ Encourage employees to use alternative transportation through incentives.

Assembled Policy:

Policy Principle (Cornerstone):	Other Building Blocks (actions and results)
The City can support conservation through education and incentives.	▪ Encourage Leadership in Energy and Environmental Design (LEED) certification for new developments. ▪ Educate the public about energy efficient appliances, alternative energy sources, weatherization, and other personal actions that can be taken to reduce energy consumption. ▪ Provide flexibility in the land use process to take advantage of solar radiation ▪ Develop incentives for private sector development to use energy efficient materials and appliances, and other energy conservation efforts.

Assembled Policy: